Title: Washing Machine Lid with Magnetic Lid Sensor

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This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1-10. (Cancelled)

11. (currently amended) A lid lock for a washing machine lid comprising:

a hook pivotable about an a first axis to move between a first position in which opening of the closed lid is prevented by interference between the hook and an engagement surface on the lid, and a second position in which the closed lid is free to open generally along a second axis crossing the first axis; and

an actuator linked to the hook to move the hook between the first position and the second position;

wherein a contact interface between the hook and the engagement surface is selected to prevent a force urging an opening of closed lid from moving exerting a torque about the first axis tending to move the hook to the second position.

- 12. (original) The lid lock as recited in claim 11 wherein the actuator operates alternately to move the hook toward and away from the second position
- 13. (original) The lid lock as recited in claim 11 wherein the actuator is a bidirectional solenoid.
- 14. (currently amended) The lid lock as recited in claim 11 wherein the engagement surface moves along a tangent line with movement of the closed lid to open and wherein the <u>first</u> axis of the hook lies along the tangent line as extended in a direction opposite the direction of movement of the engagement surface.
- 15. (original) The lid lock as recited in claim 11 wherein the engagement surface is an aperture in the lid and the hook engages the aperture.

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16. (original) The lid lock as recited in claim 15 wherein a portion of the hook engaging the aperture includes a central tooth entering the aperture and flanking shoulders resting against sides of the aperture when the tooth is so engaged.

17. (currently amended) A lid lock for a washing machine lid comprising:

a hook pivotable about an axis to move between a first position in which opening of the closed lid is prevented by interference between the hook and an engagement surface on the lid, and a second position in which the closed lid is free to open;

an actuator linked to the hook to move the hook between the retraction position and the engagement position;

a spring mechanism communicating with <u>the</u> hook for urging the hook toward the first position when the hook is proximate to the first position and urging the hook toward the second position when the hook is proximate to the second position; and

a contact set communicating with the hook to provide a switch output indicating when the hook is at the first position as distinguished from when the hook is in at the second position.

- 18. (original) The lid lock as recited in claim 17 wherein the actuator operates to alternately move the hook toward and away from the first position.
- 19. (original) The lid lock as recited in claim 18 wherein the actuator is a bidirectional solenoid.
- 20. (currently amended) The lid sensing lock of claim 17 wherein the contact set provides a closed circuit between a first and second terminal when the hook is in the first position and an open circuit between the first and second terminals when the hook is in the second position.
- 21. (currently amended) The lid sensing lock of claim 17 wherein the contact set includes a sliding contact moving laterally over a stationary contact and wherein the stationary contact is positioned next to a cam surface engaging the sliding contact with overtravel of the sliding contact to lift the sliding contact transversely away from the stationary contact.
  - 22. (new) The lid lock of claim 11 further including:

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a cap sized to cover a hole in the housing of a washing machine near a point of rest of the washing machine lid when the washing machine lid is closed, the cap including at least one downwardly opening hole;

a lock housing having at least one mounting hole conducting a shaft of an upwardly extending screw receivable within the downwardly extending hole of the cap to compress the washing machine housing between an upper surface of the lock housing and a lower surface of the cap when the screw is tightened; and

wherein the first axis is proximate to the mounting hole.

- 23. (new) The lid lock assembly of claim 22 wherein the downwardly opening hole is blind to present a continuous upper cap surface.
- 24. (new) The lid lock assembly of claim 22 wherein the cap is an elastomeric plastic over a non-elastomeric plastic base the latter supporting the threaded hole.